

PD6 Exh 16

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Cardinal Health

Operations, Compliance and Information Technology

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Agenda

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Cardinal Health has asked Deloitte to provide thoughts on it's strategic supply chain initiatives

Currently, compliance and operations FY2010 initiatives are a collection of projects. There is a need for a cohesive strategy (vs. a number of conversations) to create a comprehensive roadmap and provide the most value to Cardinal Health.

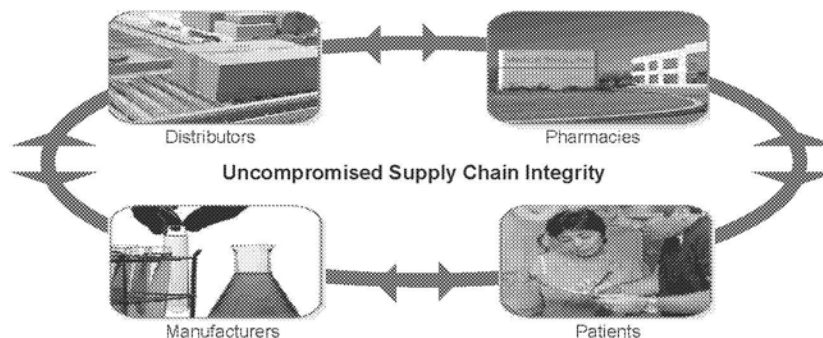
Meeting Objectives

- Provide a Deloitte Point of View regarding Cardinal Health's Pharmaceutical Supply Chain road map
- Provide an overview of initiative threads to improve Cardinal Health's Pharmaceutical Supply Chain performance
- Overview Deloitte methodologies to accelerate, prioritize, execute and increase value for Cardinal Health
- Introduce Deloitte's approach for conducting a Supply Chain IT Strategy



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Cardinal's IT Supply Chain Strategy must be developed to support and enhance the business' current Supply Chain and strategic direction



An integrated IT strategy addresses the alignment between supply chain business capabilities (whether current or future) and the IT capabilities needed to enable them. The supply chain business strategy provides the context. The development and enhancement of supply chain IT capabilities must be developed as an integral part of the supply chain strategy and objectives, and any IT constraints or IT possibilities (for further business improvement) must feed back into the development and implementation of that strategy.


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The alignment between IT strategy and Supply Chain Strategy at Cardinal Health should progress towards the “leading” stage

Level 2	Stage 1 (Lagging)	Stage 2 (Developing)	Stage 3 (Performing)	Stage 4 (Leading)
Business Strategy & IT Alignment	<ul style="list-style-type: none"> ■ No effort to align IT and supply chain strategy ■ No effort to align business strategy and supply chain strategy ■ No IT strategy (or components thereof) exists ■ No efforts in place to keep supply chain and IT strategy in synchronicity with each other ■ No involvement of IT in supply chain strategic decisions 	<ul style="list-style-type: none"> ■ Preliminary and immature efforts to align IT and supply chain strategy ■ Preliminary and immature efforts to align business and supply chain strategy ■ Adhoc IT strategy components exist that only address some supply chain business capabilities ■ Awareness to ensure that supply chain and IT strategy remain in synchronicity with each other ■ Adhoc involvement of IT in some supply chain strategic decisions 	<ul style="list-style-type: none"> ■ Need for alignment is well understood; Regular cadence of alignment actions in place ■ Need for alignment is well understood; Regular cadence of alignment actions in place ■ Mature IT strategy components exist that address most supply chain business capabilities ■ Robust, documented process instituted to ensure that supply chain and IT strategy, remain in synchronicity with each other ■ Active involvement of IT in most supply chain strategic decisions 	<ul style="list-style-type: none"> ■ Pro-active alignment due to true business partnership between business and IT ■ Pro-active alignment due to true business partnership between business and supply chain strategy ■ Mature IT strategy components exist that address most supply chain business capabilities; IT provide some supply chain leadership / innovation ■ Organization culture actively ensures that supply chain and IT strategy remain in synchronicity with each other ■ IT and supply chain partner to make all supply chain strategic decisions



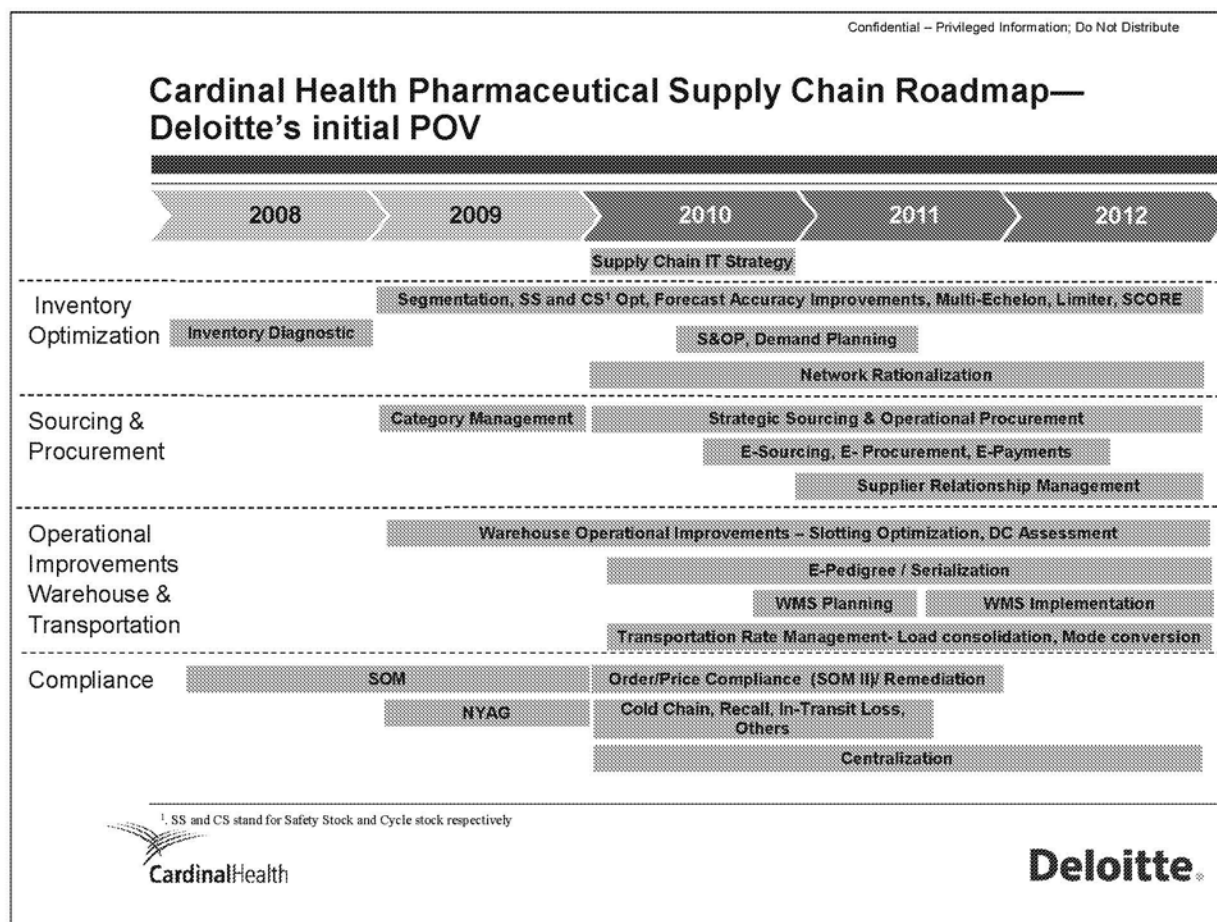
(From Deloitte's Integrated Supply Chain Maturity Model)

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Supply Chain Roadmap



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Our best POV based on being around for 14 months

Need to do a diagnostic to be even more prescriptive

All have some IT component (some very heavy—i.e., SOM Centralization; WMS; etc.)

What does each bar mean :

SC Diagnostic : The purpose is to be even more prescriptive as we find additional opportunities

Inventory Analytics : The purpose is to improve efficiency and accuracy by creating a managed data mart to contain current and historical fill rates by supplier and class of trade

Network Rationalization : Consolidation of network by closing of facilities. Results in improved service level, lower OPEX and lower inventory by leveraging lower safety stock. About \$20 MM - \$35 MM inventory reduction per DC closure.

Segmentation, Safety Stock Optimization, Forecast accuracy improvements :

Multi-Echelon, Dynamic Limiter-SCORE : Improve efficiency and accuracy of inventory forecasting, planning and replenishment through more accurate representation of the Cardinal Network. This capability should enable more accurate forecasting of inventory movements throughout the network ultimately resulting in the identification of additional supply optimization. Use Dynamic limiter capability to provide “fair share” allocation of inventory resulting in optimization of order and safety stock.

Slotting Optimization : Purchase and installation of a commercial inventory location optimization tool (slotting). Results will be improved pick efficiency, less emergency replenishment, better space utilization within facilities and zones. Pilot is underway is FY09

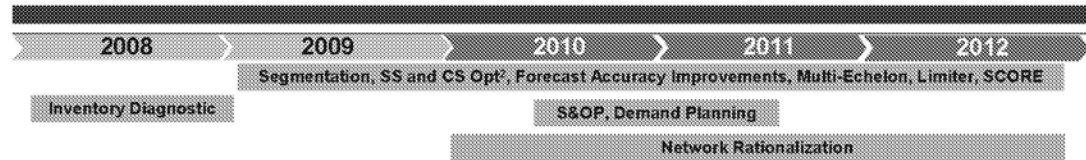
DC Assessments & Improvements : General improvement opportunities to increase warehouse efficiency. Also create a DC Scorecard that reports people (audit, turnover), perfect order (fill rates, on-time departure and defects per million) and economic (inventory carrying costs, productivity efficiencies, and delivery expenses)

ePedigree / Serialization: Continue to build end to end serialized pedigree capability. Implement serialization at NLC and strengthen customer capabilities

WMS Planning and Implementation : Project to assess business case to upgrade/replace current on-site automated warehouse management processes and tools know as AMS. The project will analyze the opportunities and size the effort to re-write the solution.

Order & Price Compliance : Additional enhancements to current SOM capability and processes to fully meet DEA requirements, e.g. dosage monitoring. Improve efficiency and effectiveness of communication of thresholds and events distribution and management of process knowledge and training

Inventory Optimization



Project Description	Major Activities	Potential Value / Benefits
<ul style="list-style-type: none"> Inventory Analytics: Segmentation, Safety Stock Optimization, 	<ul style="list-style-type: none"> Create detailed assortment and service level models for the various locations in the supply chain Conduct COGS and velocity based hybrid segmentation, safety and cycle stock optimization Analyze demand patterns through the use of multi-dimensional models and statistical algorithms Develop statistical based order quantity and safety stock logic resulting in inventory optimization 	<ul style="list-style-type: none"> Replaces blanket "rule of thumb" inventory guidelines with differentiated policies statistically tied to supply chain capabilities Reduce supply volatility to create operating cost efficiencies Minimize costs associated with holding inventory
<ul style="list-style-type: none"> Multi-echelon, dynamic limiter, SCORE 	<ul style="list-style-type: none"> Implement a multi-echelon inventory model that sets inventory targets for each discrete stage of the supply chain 	<ul style="list-style-type: none"> Optimized Inventory Levels to Identified Multi-echelon Inventory
<ul style="list-style-type: none"> Sales & Operational Planning, Demand Planning 	<ul style="list-style-type: none"> Create a common plan Build a collaborative environment Measure performance consistently 	<ul style="list-style-type: none"> Supply/ demand imbalances proactively identified and addressed One aligned/ realistic operational plan
<ul style="list-style-type: none"> Network Rationalization 	<ul style="list-style-type: none"> Conduct simulation and analysis to optimize pool point consolidation, cross docking and direct ship opportunities Model multiple possible distribution network scenarios, compare the cost savings and service-level impacts of each scenario 	<ul style="list-style-type: none"> Reduce distribution and transportation costs due to less order expediting

². SS and CS stand for Safety Stock and Cycle stock respectively



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Sourcing and Procurement

2008	2009	2010	2011	2012
	Category Management	Strategic Sourcing & Operational Procurement		
		E-Sourcing, E-Procurement, E-Payments		
		Supplier Relationship Management		
Project Description	Major Activities	Potential Value / Benefits		
<ul style="list-style-type: none"> Category Management 	<ul style="list-style-type: none"> Document & stratify spend Understand what categories should be centrally managed vs. coordinated vs. business-led Identify categories for indirect and direct sourcing Create category-level recommendations & considerations 	<ul style="list-style-type: none"> Reduces Category Total Cost of Ownership Typical savings in range of 5-10% for direct sourcing Typical savings in range of 5-35% for indirect sourcing 		
<ul style="list-style-type: none"> Strategic Sourcing and Operational Procurement 	<ul style="list-style-type: none"> Identify all related Total Cost activities Evaluate effectiveness of the current process Determine Total Cost of Process Benchmark Total Cost process Perform supplier assessment 	<ul style="list-style-type: none"> Enables bundled purchasing, provides visibility and leverage of actions Facilitates the development and execution of a single, enterprise-wide strategy 		
<ul style="list-style-type: none"> E-Sourcing, E-Procurement, E-Payments 	<ul style="list-style-type: none"> Identify opportunities for electronic cataloging Identify opportunities for automated approval routing 	<ul style="list-style-type: none"> Integrated system provides seamless and touchless flow of data through entire source-to-pay process 		
<ul style="list-style-type: none"> Supplier Relationship Management 	<ul style="list-style-type: none"> Segment and manage suppliers based on purchase history and established supplier performance metrics Initiate KYC – Know your supplier / customer process to better understand the business opportunities Develop a scorecard to pre-screen suppliers based on their capabilities/functional or geographical coverage 	<ul style="list-style-type: none"> Optimized customer service and cost performance through deep supplier relationships Creates opportunities to bucket suppliers into direct and indirect sourcing categories for future use 		


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Operational Improvements

2008	2009	2010	2011	2012
Warehouse Operational Improvements – Slotting Optimization, DC Assessment				
E-Pedigree / Serialization				
WMS Planning			WMS Implementation	
Transportation Rate Management- Load consolidation, Mode conversion				
Project Description	Major Activities		Potential Value / Benefits	
■ Warehouse Operational Assessment - Slotting Optimization and DC Assessment	■ Develop ABC stratification to recommend placement (slotting) of items ■ Review slotting, facility layout, workload distribution and activities at DC		■ Improved productivity ■ Quicker availability of product and 10% - 15% reduction in picking time ■ Reduce zero fills ■ Cycle time reductions	
■ E-Pedigree / Serialization	■ Capture business requirements , Capture technical/ functional requirements and translate them to specifications ■ Draft deployment roadmap and timeline required to meet compliance ■ Develop cost model for hardware, software, resource and on-going costs		■ Improved customer safety ■ Stronger Brand Image ■ Enhanced compliance & awareness ■ Reduces risk	
■ WMS Planning & Implementation	■ Capture business requirements , Capture technical/ functional requirements and translate them to specifications ■ Review Picking, Receiving and Verification Processes		■ Optimize productivity and operational efficiency ■ Increase inventory accuracy ■ Increase services to end users	
■ Transportation Rate Management- Route optimization, Load Consolidation, Mode conversion,	■ Understand Operational Detail - Carrier Base, cost by mode, Agreements, Key Lanes, Constraints & Requirements, etc.		■ Optimize mode, carrier or routing	


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Compliance

2008	2009	2010	2011	2012
	SOM			
	NYAG	Order/Price Compliance (SOM II) / Remediation		
		Cold Chain, Recall, In-Transit Loss, Others		
		Centralization		
Project Description	Major Activities		Potential Value / Benefits	
<ul style="list-style-type: none"> Order / Price Compliance (SOM II) / Remediation 	<ul style="list-style-type: none"> Complete the list of requirements from Phase I (those that are only partially complete) and Phase II (requirements that were pushed to after roll-out of SOM to all channels) Create IT enhancements for Scalability - Need to develop "plug and play" methodology for reapplying SOM in other business units, for new drugs, etc. Improve efficiency and effectiveness of process and technology to work towards transaction level SOM Create scalability for future growth or increased statutory requirements 		<ul style="list-style-type: none"> Position CAH to proactively accommodate new regulatory requests Centralize monitoring activities into one department Improve efficiency and effectiveness of communication of thresholds and events Improves decision support capabilities to back up Subject Matter Experts and ensure highest level of capability at all times (redundancy) 	
<ul style="list-style-type: none"> Cold Chain, Recall, In-Transit Loss, Others 	<ul style="list-style-type: none"> Continue to monitor and identify potential supply chain integrity issues Create the ability to predict/meet/resolve the issues immediately 		<ul style="list-style-type: none"> Identify "gaps" in supply chain integrity and create capabilities to mitigate risk. Recall event estimated at \$3 – 5M; In-transit loss estimated at \$1 - 3M (cost avoidance) 	
<ul style="list-style-type: none"> Centralization 	<ul style="list-style-type: none"> Create a "layer" around current distinct systems to allow effective and efficient share of accurate/timely data Create the ability to execute change quickly and efficiently through all business units Work effort of IT and QRA to further define "dashboard" requirements and the integration needs of legacy systems 		<ul style="list-style-type: none"> Quicker response time Increase timeliness of detection by reducing latency of data throughout the network. "Cockpit" for QRA to address issues and make changes that are systemically executed 	


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**Deloitte Partnership—
Accelerate, Prioritize, Execute & Increase Value**



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Deloitte has leveraged multiple projects to deliver more than expected, working across a number of functions/business units

Project SOM

Led project with Compliance, Sales, Sales Operations, Communications, Training, General Counsel and Operations to implement Suspicious Order Monitoring (which includes 2 threads):

- **Know Your Customer** – knowledge of customer's business model, history, and plans
- **Electronic Monitoring** – Development of a systemic way to Identify, Block and Report orders of controlled substances that are suspicious due to quantity, pattern or frequency
- Implemented across all channels of trade (approximately 30,000 DEA #'s)

Project AUDIT

Led the preparation of all Distribution Centers, Corporate Compliance, Sales, and Customer Service for DEA Audits

- Development of training and communication to educate, test and retest employees prior to audits
- The development of a repository to hold all important documents accessible anywhere
- The development and training of new SOP's for DC's, Sales and Corporate Compliance

Project NOW

Execution of SOM across additional Cardinal Health business units (PharmPak, Brokerage, SPS, ParMed, Borschow):

- The rapid execution of SOM across differing systems, business models, organizations and processes
- Implemented across 3 business units in 3 months with the capability to start-up 2 additional units at any time

Project NYAG

Leveraged SOM processes/systems to current NYAG activities and developed a workplan to transition to existing Cardinal organizations

- Development of a workplan that would transition all processes from a project team to an existing organization
- Development of analytics that mitigated additional price diversion risk formally not monitored

Project Ambulatory Care

Apply current SOM methodology to Cardinal Health Med Ambulatory Care business opportunity

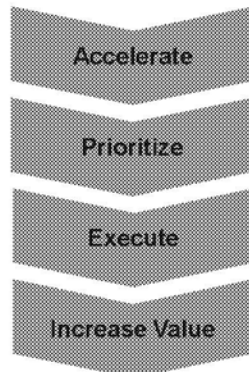
- Execute SOM across new customer channels (practitioners and surgery centers) in a different Cardinal Health business model



Talk about working across functions for SOM; leveraging SOM into NYAG and NOW; working across Business Units in NOW; working with Med in Ambulatory Care

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Deloitte's experience at Cardinal Health, coupled with tools, frameworks and methodologies, will enable the successful execution of identified projects



Deloitte Provides

- Supply chain assessment methodologies to accelerate and identify improvement opportunities
- Proven analytics tools to jumpstart and support rigorous supply chain assessments
- Templates and frameworks specific to the Life Sciences Healthcare industry (e.g. value map, industry print, etc) to prioritize supply chain projects
- Subject matter experts with prior work experience in Life Sciences Supply Chain & Operations to prioritize initiatives and lay out high-level execution roadmap for Cardinal Health
- Recent and relevant experience with Cardinal Health
- Realistic, proven PMO processes to support effective execution
- Proven execution experiences across several Life Sciences clients
- Prior experience in improving inventory deployment and planning to increase service levels
- Prior experience in generating Indirect sourcing savings from 5-35% (depending upon the category)
- Prior experience in reducing warehousing costs by 10-15% via flow patterns

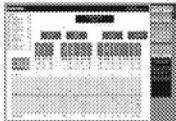


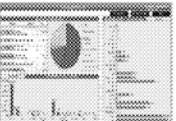

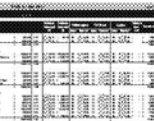
Deloitte is a Leader in Life Sciences Supply Chain & Operations

- Deloitte's extensive network of Supply Chain and Operations experts delivers services across the entire value chain
- Our practice delivers executable strategies that focus on process, organization, technology, and operations solutions
- Our supply chain practitioners have cross-industry experience as well as capabilities across the supply chain service offerings
- We bring dedicated practitioners with deep life sciences supply chain experience to assist our clients


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Accelerate—Deloitte Advanced Analytics Resources

Supply Chain Analytics Models					
1. Supply Chain Diagnostic Tool	2. Working Capital	3. Transportation Bid Analysis Tool	4. Category Sourcing Models	5. BuyRite Product Flow Path Optimizer	6. Temp Labor Bid Optimization
–Top-down model that provides a diagnostic on a company's performance against its peers for each of the value drivers as part of the EVM framework	–AP / AR tool that sizes an income statement and balance sheet opportunity based on invoice level data	–The Bid Selection Tool analyses huge volumes of bidding information and awards lanes to lowest bidders	–Project execution methodology developed for – Travel, Temporary Labor, MRO which also includes a Total Cost of Ownership Model	–Buy-Rite is a cost modeling tool that uses actual supply chain costs for alternative flow paths for each product to identify the best flow-path for each product	–Temp labor bid optimization model helps companies arrive at intelligent and cost effective sourcing and procurement decisions while ensuring that the business constraints are met
					


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Notes : Deloitte has a team of dedicated practitioners that create complex supply chain models and perform “high power” analytics to accelerate Supply chain assessments. The group provides round-the-clock support for the client service.

Examples of some of the Supply chain analytical models include :

Supply Chain Diagnostic tool: This is a great benchmarking tool that provides a high level overview of company's supply chain performance. The tool compares the company's performance to its peers and links to the value components of the Enterprise Value Map.

Inventory optimization model: that is both excel and access based and takes into account large volume of supply chain data to perform inventory modeling at SKU level. It performs both velocity and COGS based segmentation at SKU level and assists with the working capital optimization

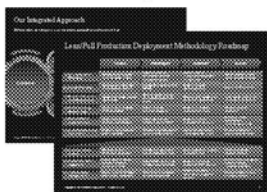
Transportation Bid analysis tool : This is an excel based tool that analyzes huge volume of transactional data (bidding information) and performs both TL and LTL bidding for the client.

Category Sourcing Model: This consists of techniques and methods required to strategically source a specific category effectively. It includes an overview of the supply market, sourcing best practices, benefit measures & tracking.

Prioritize—Deloitte's Project Toolkit

Lean/Pull Roadmap

Enterprise wide integrated approach to implement lean operating culture, production system alignment and information management



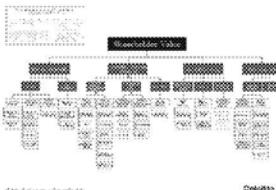
DISC Method

Method and framework to rapidly diagnose the state of our clients' supply chains and identify improvement opportunities to extract significant value



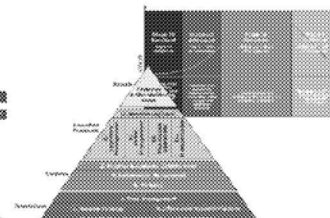
Value Map

Practical, one-page management framework that shows the relationship between shareholder value and business operations



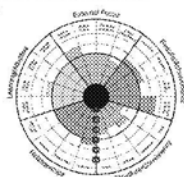
Capability Maturity Model

The 'Capability Maturity Model' (CMM) describes key competency areas in the Supply Chain functions



Culture and Change

Methodology to facilitate the change, communications and learning activities that are closely linked at any implementation program



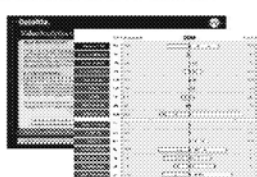
Industry Print

Enterprise-wide process models identify industry-specific best practices mapped to best-of-breed Supply chain applications



Value Analytics

Comparative financial analysis tool that's main objective is to assist in the historic performance benchmarking of a company



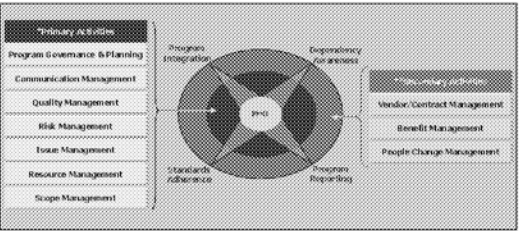
Value Stream Maps

Application designed to map a process at a handoff level of detail and make non-value added waste visible in the process)

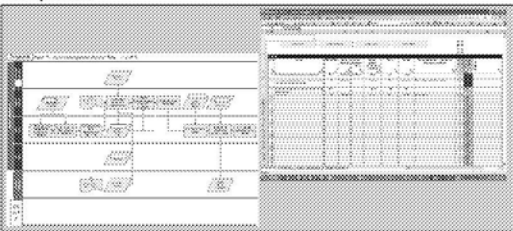


Execute—Deloitte’s PMO Capabilities and Experience

PMO Framework



PMO Procedures, Processes, Standards, Tools and Templates



Program Integration

- Alignment of the portfolio of projects with the business strategy
- Synergies maintained across the program through the employment of standardized tools, processes, and practices

Dependency Awareness

- Linkages and dependencies are highlighted to ensure program-wide understanding across the portfolio of projects

Program Reporting

- Program leadership gets information they need to make effective, and timely decisions

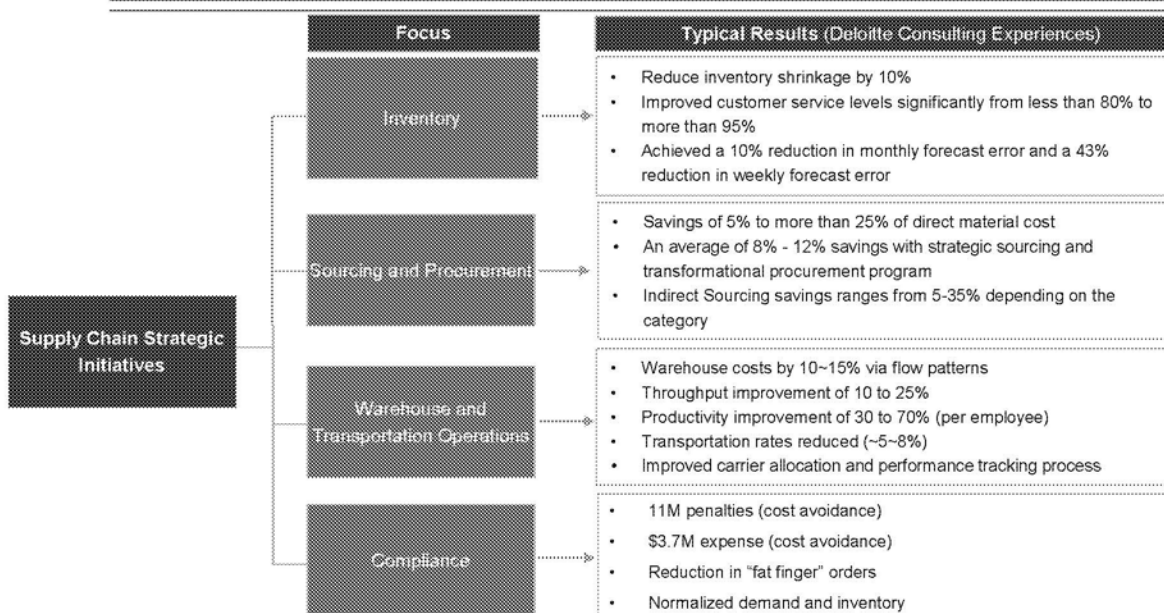
Standards Adherence

- Standards are developed and disseminated for quality and project management
- Compliance with and appropriate application of standards is monitored



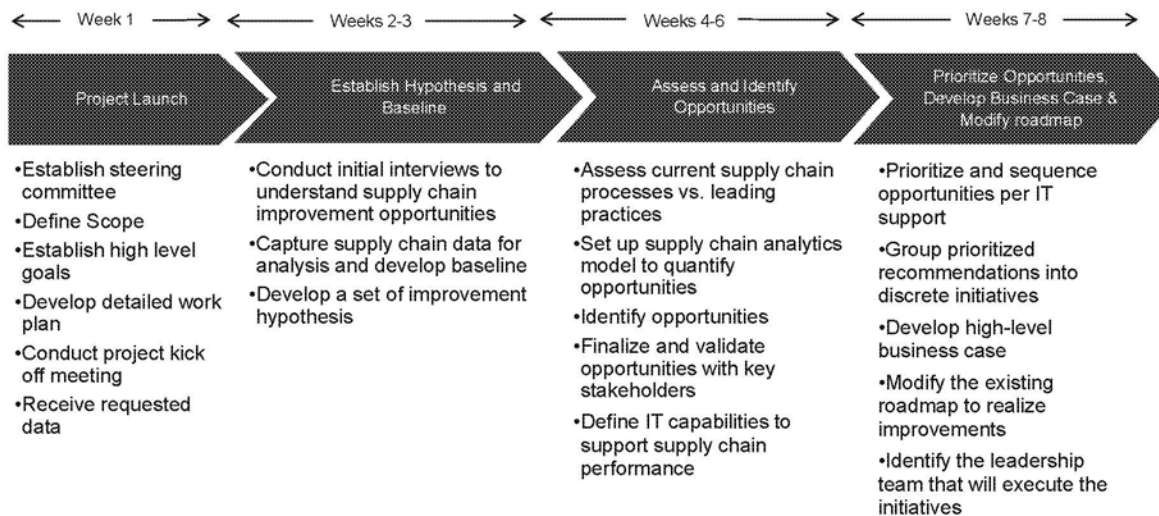
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Increased Value—Deloitte's Client Experience



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To effectively combine operations, compliance and IT projects, Deloitte recommends a Supply Chain IT Strategy



Build towards Uncompromised Supply Chain Integrity



* The above timeline assumes that the supply chain data will be received prior to the start of the project

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Next Steps

- Obtain agreement to execute a Supply Chain IT Strategy effort
- Obtain contacts/resources to develop the strategy across operations, compliance and IT
- Develop infrastructure and support for the project work
- Develop data request
- Continue to move initiatives forward as Strategy is being developed

